THE SENTINEL
OFFICIAL SAFETY NEWSLETTER OF CIVIL AIR PATROL

We Have the Policies, Let's Educate and Enforce!

Research shows that most accidents are caused by individuals or teams improperly carrying out a plan or mission. These errors can be from poor planning, or improper or incomplete execution of the plan.

Some of these errors are around us everyday. We accept them as a normal or standard procedure. As shown in the old accident chain theory, these errors only become evident when they mix with certain other errors. When enough of these combine, the weakest link breaks.

We as managers must set the example. We must make our safety standards understood at all levels of the organization; and, we must enforce those standards! We do this through regulations, interim change letters, and checklists. We must take an active role in enforcing and demanding compliance to our rules and regulations. The printed 18 month expiration date on a CO detector is not a valid excuse to disregard CAP's limitation of 12 months. Units that only enforce those rules that are convenient or those that do not hinder the current mission are setting themselves up for a fall.

Managers must set the standard both formally and informally. If you value safety, make it your priority. When you do a risk assessment, think of the consequences of disregarding our standards or how you are possibly going to justify them to the mishap investigator.

Col John Tilton, CAP/SE

Safety Preparedness

As members we have been receiving messages from our acting National Commander about the importance of being prepared for disasters during the month of disaster awareness. This editor believes there is an important safety message in being prepared for a disaster and I will reprint Gen Courter's "Are You Prepared" quiz as a test with answers given. It is part of our safety culture to have the senior leadership involved and proactive in our safety education. Safety is everyone's responsibility in the CAP.

Lt Col Larry Mattiello, Sentinel Editor

CAP Safety Team

Col John Tilton, *CAP/SE*
tiltonj@alltel.net

Col Charles Greenwood, *GLR/SE*
CGREENWO@bsu.edu

Col Charles Glass, *MER/SE*
csglass@juno.com

Lt Col Bruce Brown *NER/SE*
bbrown@ner.cap.gov

Maj George Cobley, *NCR/SE*
gacobley@aol.com

Lt Col Mike Howell *PCR/SE*
mehowell@charter.net

Lt Col Donald Johanson, *RMR/SE*
johansondon@msn.com

Maj Ernest Manzano, *SER/SE*
emanzano@ser.cap.gov

Maj Henry Lile, *SWR/SE*
hlile@aol.com

Lt Col Larry Mattiello, *Editor*
Phone: 917-969-1812
Fax: 972-991-5855
lmattiello@airsure.com

HQ Civil Air Patrol/SE
105 South Hansell Street
Maxwell AFB AL 36112-6332

Are You Prepared?

Over the past month I have sent the entire membership several messages in the hopes of helping you and those around you to be better prepared for when disasters strike as part of our National Preparedness Month initiatives. I hope that we have all been successful in reaching out on this critical issue of preparedness. As one last self-check, I am providing an emergency preparedness quiz developed by the Department of Homeland Security for National Preparedness Month. Take a moment and review it with your family and friends, and once you've completed it visit http://www.ready.gov/ and put together an emergency supply kit and family emergency plan for you and your family. Thank you for your support of National Preparedness Month!

Emergency preparedness Quiz *(with answers, editor)*

1. A family emergency plan should include:
   - Information about the emergency plan at your children's schools.
   - The name and phone number of an out-of-town contact person. A list of important phone numbers, including those of doctors and emergency services. A central meeting spot outside your home and one outside your neighborhood in case you need to leave the area.
2. When preparing for a possible emergency situation, it is best to think first about the basics of survival. You should consider a necessity of survival drinking water, food, clean air, and warmth.
3. The following items should be included in a basic emergency supply kit: water, non-perishable foods, battery operated radio, dust mask or cotton fabrics, whistle, important family documents, flashlight and extra batteries, manual can opener, plastic sheeting and duct tape, garbage bags and plastic ties, wrench or pliers, first aid kit, and unique family needs such as infant formula or prescription medicines.
4. The following is a recommendation action for emergency preparedness: creating a family emergency plan, becoming knowledgeable about types of potential emergencies and responses, and getting an emergency supplies kit.
5. The steps pet owners take when preparing their pets for emergencies include: assemble an emergency supply kit with enough pet food and water for three days, as well as medication, medical records, leashes and ID tags. Develop an emergency plan that considers the pets' needs and make a list of animal shelters or veterinary hospitals in other cities where a pet may need to be temporarily sheltered. Plan with neighbors, friends, or relatives to make sure that someone is available to care for or evacuate pets if you are unable to do so. And to alert rescue workers during a fire or other emergency, place "Pets Inside" stickers on doors or windows, including information on the number and types of pets.
6. The federal governments Web site that provides information about how to get prepared for a natural disaster or other emergency is http://www.ready.gov/.
7. The Ready Kids portion of the Ready Web site includes the following: in school geography and language arts material developed by Scholastics Inc., down-loadable activity books and stickers, interactive games and activities for children ages 8-12, and resources and links to other organizations that promote emergency preparedness and provide information on how to help children cope with emergency situations.

Brig Gen Amy Courter CAP
Acting National Commander

Risk Reduction Decision Making – Beyond the Go/No-Go Decision

We are quite used to air and ground crews discussing the "go/no-go" decision. Basically people look at the risks, maybe employ some risk matrix, and then jump to making a simple binary (yes/no) choice. The binary philosophy is that any time the risks outweigh the benefits a "no-go" decision is warranted. On the other hand, if the benefits outweigh the risks we "go" and the mission proceeds on its merry way. Right? WRONG!!!!

The risk reduction decision is far from a binary decision. The goal of Operational Risk Management (ORM) is to continually manage risks and in the end accept no "unnecessary" risks. That opens the door to all kinds of risk reduction measures. If terms like reject, avoid, delay, transfer, compensate, spread, reduce, engineer, limit exposure, improve task design, select special personnel, train & educate, motivate, warn and reduce effects are not part of your ORM toolkit, they need to be. You can find some excellent, straightforward tutorials on ORM at www.cap.gov/safety under the ORM tab. Another good selection is the *CAP Guide to ORM* found at http://level2.cap.gov/documents/Guide_to_ORM.pdf The most important point is that these techniques can be synergistically employed in combinations to significantly reduce risks to a lower level than applying one technique alone; and they should be used before and after the go/no-go decision is made. This can push the operational balance far into the benefit side of the equation.

Examine a hypothetical case. It is 0100 hours on a moonless night, with high flying aircraft reporting an ELT in rugged mountains. The Incident Commander has several decisions to make, each with different risks. He could REJECT the night sortie altogether and wait until daylight, which is only 4 hours away. He could DELAY the launch until ground teams arrive in the area and thereby LIMIT EXPOSURE to the aircrew to the higher risk night conditions. He could launch a technically qualified, but relatively inexperienced crew or he could SELECT SPECIAL PERSONNEL (e.g. two IFR current and qualified search pilots) that can better handle the mission. He could employ specially ENGINEERED equipment, like a G-1000 equipped Skylane that is based further away, but that has added terrain map capability to significantly improve crew terrain situational awareness. He/she could, of course, WARN crews as to the hazards they face on the night flight. In the end, the decision might be to launch a specialized crew, 1 hour before morning civil twilight, in the G-1000 Skylane. It may not be quite as low a risk as delaying until morning, but overall it is much less risk than sending a marginally qualified, but closer, crew for a several hour night sortie over the mountains in a traditional Cessna.

Moving away from the hypothetical case, a CAP flight was approaching an airport with light winds a few years back. The ATIS indicated both Runways 35L and 35R were clear and dry, but Runway 30, (the one closest to the CAP hangar) was covered with a layer of thin patchy snow and ice. Are you surprised the pilot elected to use Runway 30? Fortunately there was no mishap, but it does show the pilot did elect the higher risk option to get a shorter taxi time. Think of how the mishap investigation would come out if the pilot had slid off the runway and damaged the aircraft because he selected an icy runway over a dry one.

Remember, ORM is a continuous and careful application of several risk

reduction techniques that can be applied in many combinations to keep reducing risks well beyond the point of a traditional "go" decision. And while the examples use aircraft, it is just as applicable to ground operations, driving, and unit activities. By learning and explicitly using these risk reduction measures you can significantly tilt the benefit to risk ratio much more in your favor.

Lt Col Don Johanson RMR/SE

Summary of CAPFs 78 Received at NHQ CAP for August 2007

Aircraft

Aircraft crashed while conducting search.

Aircraft ran off runway collapsing front landing gear and causing prop strike.

Right wing made contact with hangar door.

Vehicle

Vehicle returned from National event with dent on left rear door, bumper and roof.

Equipment in back of van shifted while vehicle in motion and broke right back window.

Bodily Injury

Cadet slipped and hit knee against trash can he was carrying.

Cadet rolled right foot due to unsure footing and injured ankle.

Cadet reaching for alarm from top bunk suffered unrestricted fall to floor.

Pilot's left Achilles tendon snapped pushing airplane into parking position,

Cadet's hand slipped while doing an event at obstacle course.

Cadet hit wrist on wood versus the padded mat at obstacle course.